Project 2: An Exercise using the Jorda Method to Estimate the Effects of Taxes
Due Friday March 7, 2014, 11 am

1. Use the posted Matlab program main_us_annotated.m (along with posted Newey-West subroutine nwest.m and data set RZ_Data_2013Sept30.xlsx) to reproduce the Ramey-Zubairy graphs on pages 36 and 37 and multipliers on page 38 of the posted slides "Lecture Notes on State Dependent Government Spending Multipliers." (Note – they should be similar, but not identical, because the specification shown in the slides is slightly different.) Show the results and write just one sentence saying whether they are similar.

2. Read Romer and Romer's AER 2010 paper. Re-estimate their model, but using the Jorda method, both in a linear model and allowing for state dependence. To do this, use the following steps:

    A. Go the AEA web site and download Romer and Romer's data files. Use their variable EXOGNRRATIO (which is their tax change variable divided by nominal GDP) and add it as an additional column to the Excel file you used in part 1 above. (Note the difference in sample period!)

    B. Either modify the code in main_us_annotated.m (which I have heavily annotated for people who don't have much experience with Matlab) or write your own code using whatever software you want to re-estimate everything with taxes rather than government spending. (For example, replace the "ramey" variable with a "romer" variable which is equal to EXOGNRRATIO and compare the responses of real GDP and real taxes (rather than real government spending)). (For those who prefer to use Stata, I have posted some code that estimates Part 1 using Stata. You will have to augment it to add horizons and to create multipliers and graphs from the estimated parameters.)

    C. In your write up, (i) briefly discuss the identification strategy of Romer and Romer; (ii) compare your linear results to those of Romer and Romer; and (iii) describe briefly what you find with the state dependent results.